

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002156

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7): C12N-15/53, C12N-9/02, C12N-5/10, C12N-15/82, C12P-7/64, A01H-5/00, C07K-14/195, C12N-15/31

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(7): C12N, C12P-7/64, A01H-5/00, C07K-14/195

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

DELPHION, WEST, ESPACENET, AGRICOLA, CAPLUS, BIOSIS, REGISTRY; Keywords: (delta-9 or stearoyl-ACP) desaturase, endoplasmic reticulum (retention), transgenic, prokaryotic

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	US 5663068 A (RHONE POULENC AGROCHIMIE (FR)) 2 September 1997 - example 6; cited in the description	1-33
Y	US 6043411 A (KIRIN BEER KABUSHIKI KAISHA (JP)) 28 March 2000 - the entire document, cited in the description	1-33
Y	US 20030054521 A1 (BOOTH et al (US)) 20 March 2003 - entire document, particularly paragraph [0069]	1-33
A	VINCENT, M.J. et al., Function of the KKXX motif in endoplasmic reticulum retrieval of a transmembrane protein depends on the length and structure of the cytoplasmic domain. J Biol Chem, 9 January, 1998, Vol. 273, No. 2, pages 950-956, ISSN: 0021-9258.	1-33

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier application or patent but published on or after the international filing date
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

Date of the actual completion of the international search

21 March 2005 (21-03-2005)

Date of mailing of the international search report

04 May 2005 (04-05-2005)

Name and mailing address of the ISA/CA
Canadian Intellectual Property Office
Place du Portage I, C114 - 1st Floor, Box PCT
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Gatineau, Quebec K1A 0C9
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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material
 - in written format
 - in computer readable form
2. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments :

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. Claim Nos. :
because they relate to subject matter not required to be searched by this Authority, namely :

2. Claim Nos. : 1-5, 7, 8 (partial)
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

Searches of these claims have been restricted to SEQ ID NO:2, modified by addition of any of the retention signals recited in claims 7 and 8, as the recitation of functional attributes alone for polypeptides and polynucleotides so claimed render it impossible to undertake a meaningful search over their entire scope .
3. Claim Nos. :
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

Remark on Protest The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2004/002156

Patent document cited	Publication date	Patent family member(s)				Publication date
US 5663068	A 02-09-1997	AT 284961	E	15-01-2005		
		AU 2881292	A1	03-05-1993		
		AU 667848	B2	18-04-1996		
		BG 0098695	A	31-05-1995		
		BR 9206613	A	11-04-1995		
		CN 1072722	A	02-06-1993		
		CZ 9400817	A3	13-09-1995		
		DE 69233459	C0	20-01-2005		
		EP 666918	A1	16-08-1995		
		HU 0069781	A2	28-09-1995		
		IL 103407	A0	15-03-1993		
		JP 03537434	T2	20-04-1995		
		MX 9205820	A1	14-06-1993		
		NZ 0244685	A	27-06-1994		
		PH 0031293	A	06-07-1998		
		RO 0113256	B1	29-05-1998		
		RU 2152996	C2	20-07-2000		
		WO 9306712	A1	15-04-1993		
		ZA 9207777	A	21-04-1993		
US 6043411	A 28-03-2000	AT 0273395	E	15-08-2004		
		AU 1283795	A1	17-07-1995		
		BR 9408435	A	05-08-1997		
		CA 2180154	AA	06-07-1995		
		CN 1142853	A	12-02-1997		
		DE 69433941	C0	16-09-2004		
		EP 736598	A1	09-10-1996		
		FI 0962664	A	26-08-1996		
		JP 03313724	B2	12-08-2002		
		KR 0224120	B1	15-10-1999		
		NO 0962727	A	27-08-1996		
		NZ 277562	A	19-12-1997		
		WO 9518222	A1	06-07-1995		
US20030054521	A1 20-03-2003	AU 0186627	A5	04-03-2004		
		BR 0113563	A	03-02-2004		
		CA 2416602	AA	28-02-2002		
		EP 1311659	A2	21-05-2003		
		WO 0216565	A2	28-02-2002		